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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,941	10/30/2003	Klaus-Dieter Hammer	P179 1130.1	6279
59554 7590 01/14/2008 Womble Carlyle Sandridge & Rice, PLLC Attn: Patent Docketing 32nd Floor P.O. Box 7037 Atlanta, GA 30357-0037			EXAMINER O HERN, BRENT T	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 01/14/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/695,941

Applicant(s)

HAMMER ET AL.

Examiner

Brent T. O'Hern

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/4/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 11-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1-4, 6-9, 11-13 and 15-18 are pending.

WITHDRAWN OBJECTIONS

2. The objections to claim 11 in the Office Action mailed 4 September 2007, page 2, paragraph 5 has been withdrawn due to Applicant's amendments in the Paper filed 4 December 2007.

WITHDRAWN REJECTIONS

3. The 35 U.S.C. 103(a) rejections of claims 18-19 as being unpatentable over Hammer et al. (US 5,501,886) of record in the Office Action mailed 4 September 2007, page 6, paragraph 8 have been withdrawn due to Applicant's amendments in the Paper filed 4 December 2007.
4. The 35 U.S.C. 103(a) rejections of claim 18 as being unpatentable over Hammer et al. (US 4,529,634) of record in the Office Action mailed 4 September 2007, page 8, paragraph 10 have been withdrawn due to Applicant's amendments in the Paper filed 4 December 2007.

REPEATED REJECTIONS

5. The 35 U.S.C. 103(a) rejections of claims 1-4, 6-12, 15 and 17 as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) with evidence by Hammer et al. (US 4,529,634) are repeated for the reasons of record in the Office Action mailed 4 September 2007, page 3, paragraph 6.
6. The 35 U.S.C. 103(a) rejections of claims 13 and 16 as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) with evidence

by Hammer et al. (US 4,529,634) and in view of Crevasse (US 5,215,495) are repeated for the reasons of record in the Office Action mailed 4 September 2007, page 5, paragraph 7.

7. The 35 U.S.C. 103(a) rejections of claim 1 as being unpatentable over Hammer et al. (US 5,501,886) in view of Hammer et al. (US 4,529,634) are repeated for the reasons of record in the Office Action mailed 4 September 2007, page 7, paragraph 9.

NEW REJECTIONS

Claim Rejections - 35 USC § 103

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) with evidence by Hammer et al. (US 4,529,634).

Hammer ('886) teaches a food casing comprising cellulose and an additive (See *col. 7, ll. 15-27 and col. 8, ll. 15-38*), wherein the seamless tubular food casing comprising at least one copolymer comprising units of vinylpyrrolidone and units of at least one comonomer (See *Abs., ll. 1-6 and col. 4, l. 22 to col. 6, l. 2, specifically vinylpyrrolidone as illustrate in Formula-I and at least one comonomer.*), and an admixture of cellulose hydrate (See *col. 6, ll. 29-51.*) carboxyl group-containing compounds (See *col. 5, ll. 23-55, specifically ll. 51-55, hydrophilic "unsaturated carboxyl acids" and the other carboxyl groups within the greater passage exhibiting the unsaturated carboxylic acid and/or α , β -ethylenically unsaturated carboxylic acid functionality. Furthermore, the examiner interprets Hammer's ('886) express disclosure of "unsaturated carboxyl acids" to actually mean to include "unsaturated carboxyl acids" which encompass α , β -ethylenically unsaturated carboxylic acid's such as acrylic and methacrylic acids since*

Applicant, discloses the same α , β -ethylenically unsaturated carboxylic acid's in a patent application filed over ten years prior to the filing of Hammer's ('886) (See col. 4, ll. 4-29 of Hammer et al. (US 4,529,634)), however, fails to expressly disclose a comonomer being selected from the group consisting of vinyl alkanoate, vinyl alkyl ether, conjugated alkadiene, acrylamide and α , β -ethylenically unsaturated carboxylic acid and wherein the presence of the additive is in amount sufficient to achieve, as compared to a food casing comprising cellulose without the additive: (i) lower permeation while water vapor permeability is preserved, (ii) reduced susceptibility to cellulase and increased resistance to mold, or (iii) a greater affinity of said casing to sausage-meat emulsion.

However, Borodaev ('455) teaches wherein the casing comprises a copolymer with units of vinylpyrrolidone and α , β -ethylenically unsaturated carboxylic acid (See p. 4, ll. 21-25 wherein acrylic acid and methacrylic acid are α , β -ethylenically unsaturated carboxylic acids.) for the purpose of providing a film with good hydrophilic and mechanical properties (See p. 4, ll. 6-8.). Furthermore, acrylic acid and methacrylic acid clearly provide for improved hydrophilic properties, as opposed to esters, due to their hydrophilic carboxylic acid structure.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to substitute Hammer's ('886) unsaturated carboxylic group containing compounds, including those that Hammer ('886) expressly describes as "unsaturated carboxylic acids" with the α , β -ethylenically unsaturated carboxylic acid as taught by Borodaev ('455) in order to provide a film with good hydrophilic and mechanical properties.

Furthermore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made that the cellulose, the additive and the processing parameters can be varied to provide lower permeation depending on the requirements of use (*See col. 7, ll. 15-27 and col. 8, ll. 15-38.*). Furthermore, the phrase "permeability is preserved" is interpreted as providing for the existence of or non existence of any amount of permeability.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to vary the above parameters in order to provide for the above permeation.

ANSWERS TO APPLICANT'S ARGUMENTS

9. In response to Applicant's argument (p. 6, paras. 1-3 of Applicant's Paper filed 4 December 2007) that Hammer et al. (US 5,501,886) does not disclose a polymer comprising "unsaturated carboxylic acids". It is noted that Applicant cites lines 22-26 of column 5 of Hammer et al. (US 5,501,886) to support its' position, however, does not address the express teaching of "unsaturated carboxylic acids" as disclosed in lines 51-55 of column 5 as cited by the Examiner. The only plausible reason why Applicant does not want to address this express teaching is that said teaching contradicts Applicant's position and teaches what Applicant does not want it to teach. Furthermore, Applicant's assertion that "unsaturated carboxylic acids" are esters is not supported by science and a mere assertion of such does not make the two equivalent.

Furthermore, inventor Hammer, a named inventor in Hammer et al. (US 5,501,886), defines "unsaturated carboxyl acids" to encompass α , β -ethylenically unsaturated carboxylic acid's such as acrylic and methacrylic acids in a patent application

(See col. 4, ll. 4-29 of *Hammer et al.* (US 4,529,634).) filed over ten years prior to the filing of *Hammer* ('886).

10. In response to Applicant's argument (p. 6, para. 3 of Applicant's Paper filed 4 December 2007) that the α , β -ethylenically unsaturated carboxylic acid's in *Hammer et al.* (US 4,529,634) have a different use than in *Hammer et al.* (US 5,501,886), thus, do not teach α , β -ethylenically unsaturated carboxylic acids, it is noted that (US 4,529,634) is cited as evidence, not as an art reference, defining unsaturated carboxylic acids.

11. In response to Applicant's argument (p. 7, paras. 1-2 of Applicant's Paper filed 4 December 2007) that since *Borodaev's* ('455) primary teaching is not directed to cellulosic casings then *Borodaev* ('455) can not teach vinyl pyrrolidone and α , β -ethylenically unsaturated carboxylic acids for food casings, it is firstly noted that whether or not *Borodaev* ('455) teaches other compositions is not material since *Borodaev* ('455) teaches vinyl pyrrolidone and α , β -ethylenically unsaturated carboxylic acids for food casings. Furthermore, cellulosic food casings are well known food casings to a person having ordinary skill in the art and *Borodaev* ('455) is not silent on said matter.

12. In response to Applicant's discussion (p. 7, paras. 3-4 of Applicant's Paper filed 4 December 2007) regarding claims 13 and 16, it is noted that no further precise arguments are presented.

13. In response to Applicant's arguments (p. 8, paras. 1-2 of Applicant's Paper filed 4 December 2007) that *Crevasse* (US 5,215,495) does not teach shirring, it is noted that *Crevasse* (US 5,215,495) is cited for the length dimensions of casings, not shirring.

14. In response to Applicant's arguments (p. 8, paras. 3-5 of Applicant's Paper filed 4 December 2007) regarding claim 18, it is noted that said argument is directed to new limitations that are discussed above.

15. In response to Applicant's arguments (p. 8, para. 6 to p. 9, para. 2 of Applicant's Paper filed 4 December 2007) that claim 1 is allowable over Hammer ('886) in view of Hammer ('634) since the coating is on the outside of the casing, it is noted that Hammer ('634) teaches wherein the copolymer is part of the casing and Hammer ('634) teaches wherein the casing comprises a copolymer with units of α , β -ethylenically unsaturated carboxylic acid (*See col. 4, ll. 4-29, acrylic and methacrylic acids, which are α , β -ethylenically unsaturated carboxylic acid's.*) for the purpose of providing a film with good hydrophilic and mechanical properties while inhibiting mold (*See col. 4, ll. 4-29 and col. 3, ll. 29-43.*). Furthermore, acrylic acid and methacrylic acid clearly provide for improved hydrophilic properties, as opposed to esters, due to their carboxylic acid structure.

16. In response to Applicant's arguments (p. 9, paras. 3-4 of Applicant's Paper filed 4 December 2007) that amended claim 18 is allowable over Hammer ('634), it is noted that said rejection has been withdrawn.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on Monday, Tuesday and Thursday, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-0996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

BTH
Brent T O'Hern
Examiner
Art Unit 1794
December 27, 2007

Nasser Ahmad
NASSER AHMAD
PRIMARY EXAMINER 1/8/08